

Remarks

Reconsideration of the application is respectfully requested on the basis of the following comments:

1. Preliminary remarks

In the Response to Arguments on page 2 of the Office Action it is stated:

“The Examiner finds the arguments regarding optimization to be non-persuasive. It would be a matter of design choice to select values of operating parameters to optimize a device for desired operation. Depending on the desired operation the parameters of a device would be selected to meet a optimized performance. Such selection of parameter values is well within the ability of one of ordinary skill in the art and is not inventive.”

Applicant respectfully disagrees.

Indeed, according to “Webster’s Encyclopedic Unabridged Dictionary”, the mathematical meaning of the word “optimization” is: “a mathematical technique for finding a maximum or minimum value of a function of several variables subject to a set of constraints, as linear programming or system analysis”. An optimization process is thus not equivalent to a pure selection of values, but is rather a mathematical determination or calculation of such values. According to an example, given on page 36, lines 28-30 of the specification, this determination may be based on different readings as temperature, content, ambient illumination, aging and relative humidity (the constraints).

On page 3 of the Office Action, the following is said:

“On pages 8 and 9 of the remarks, the Applicant has argued that the claimed invention is distinct from Greene and Someya because the claimed invention is drawn to optimization of parameters of the display device. The Examiner finds this

argument non-persuasive based on the scope of the dependent claims. Later claims disclose adjustment of the display device parameters based on measurements of aging, environmental parameters and other issues (claims 11 and 13 for example). Further, the disclosure clearly states that some of the adjustments based on aging and other factors will involve the changing of the gamma curves, contrast, and brightness (paragraph 100). Such adjustments do not set a parameter of the display device but would directly adjust the image data being displayed to adjust the brightness of the image displayed. Greene and Someya disclose adjusting the image data to control brightness and contrast of the final image. Therefore, the references do disclose setting an emissive display to a target value for operation of the display device. These target values are directly used to adjust the gamma, brightness, or contrast of the final image and are the same as the target values described by the Applicant which are used to adjust the brightness, gamma curves, and contrast of the final image output.”

Applicant respectfully disagrees.

Paragraph [100] of the application (beginning at page 21, line 30) reads:

“An aspect of OLED display software system 200 is that it takes the environment into account. For example, by using a light sensor and a temperature sensor, OLED display software system 200 can ascertain the specific purpose, i.e. the application, e.g. inside or outside projection, of a particular display wall 114. Based upon this knowledge, the display content of the image, i.e. gamma, contrast, brightness, and lifetime, may be adapted.” (enhancement added).

Paragraph [100] says thus that the display content of the image is adapted and it is clear that the settings of the individual OLED's are influencing the image as it is displayed. But paragraph [100] does not say that the image data itself are adjusted, as is done in Greene and Someya. On the contrary, the application mentions consistently the setting of emissive devices, which is independent of the image data but which will, of course, influence the display corresponding to this image data.

2. Rejections of claims under 35 U.S.C. § 103

In the Office action, page 4, point 3, claims 1-10, 15-18, 20 and 23-26 stand rejected under 35 USC § 103(a)) as being unpatentable over Greene et al. (USPN: 6020868), in view of Someya (USPN: 5396257), and further in view of Cok et al. (USPN: 7161566).

This rejection is respectfully traversed for the following reasons.

Claim 1 describes a method for controlling a tiled large-screen emissive display whereby:

- a. the emissive display comprises at least a plurality of first subdivisions, each of said first subdivisions comprising a plurality of emissive devices and the method comprising:
- b. for each of the first subdivisions, setting the emissive devices so that each of said first subdivisions is optimized with respect to a first subdivision target value for that first subdivision, and
after setting the emissive devices,
- c. for the emissive display, setting the first subdivisions so that said emissive display is optimized with respect to an emissive display target value for said emissive display
- d. wherein setting the emissive devices and setting the first subdivisions includes initial and periodic calibration.

The Examiner has agreed that Greene does not disclose at least features b, c and d of claim 1.

Regarding Someya, it is stated on page 5 of the Office Action that:

"Someya discloses a method of matching the output of a tiled display device in which each display device is set to optimize the display of the individual display device and then matching the corrected individual display devices to completely match the tiled display device (col. 4, lines 37-59)."

Applicant agrees that Someya discloses a method of matching the output of a tiled display device. However, applicant respectfully disagrees that an “optimization” of the display is disclosed in Someya (see the preliminary remarks above).

In reality, Someya does not disclose any of the features a-d of claim 1.

Feature a: the display device in Someya is a CRT-device and not an emissive display.

Feature b: Because Someya is not disclosing an emissive display, the emissive devices cannot be set. There is also not an optimization of the settings of the emissive devices disclosed in Someya because the correction data applied to the image data are fixed (col. 5, lines 44-46).

Feature c: In Someya, one of the cores (=CRT) is taken as a reference and the other cores are aligned on that reference core. Someya does thus not disclose an optimization of the “subdivisions” to a target value of the whole display device.

Feature d: As admitted, Someya does not disclose an initial and a periodic calibration.

Attention is further drawn to the fact that in Someya an iterative process is described: after the corrections in each core and the subsequent correction between the cores, this procedure can be repeated (col. 5, lines 38-43); in the method according to claim 1, the controlling of the display is performed in a single run of two steps: an optimization of the first subdivisions on their own followed by an optimization of the complete display. Both consecutive optimizations are independent from each other. This means, *inter alia*, that the first optimization can be done in the factory and the second in the field, using less sophisticated equipment and procedures.

Cok discloses an OLED display with aging compensation. The elements constituting the display are arranged in a plurality of groups. Before the display is used, a given input image signal is applied to a group of light emitting elements and a measurement of the current used by the display for the given input image signal is made. The given input image signal is typically a flat field of constant luminance across the group of light emitting elements in the display. The measurement is stored in the controller circuit. The process is repeated for each group of light emitting elements. The display may then be put into use. While in use, an input image signal is applied to the controller. The controller corrects the input image signal for each group of light emitting elements to form a corrected input image signal that is applied to the display and the process repeats. Periodically a decision is made to recalibrate the display and the process, described above is repeated (col. 4, lines 42-66).

Features b and c are not disclosed in Cok.

Feature b: In Cok, a correction signal is derived for each group of emissive devices but there is no optimization of a subdivision by setting of the emissive devices; also in Cok, as in Greene and Someya, the image data are corrected.

Feature c: Cok does not disclose an optimization among the different groups. It can thus be concluded that features b and c are not disclosed in the prior art.

Claim 1 is thus clearly not anticipated by the prior art.

The prior art also does not contain any suggestion or hint pointing at features b and c, either taking the references alone or in combination of their teachings.

It is therefore submitted that, at the time the invention was made, claim 1 was non-obvious to a person having ordinary skill in the art to which the subject matter pertains.

Claims 2-10, 15- 18, 20, 23, 24 and 26 are claims dependent on claim 1. These claims are thus also novel and non-obvious over the prior art by virtue of their dependency.

Claim 24 is an independent product claim, drafted along the lines of independent method claim 1. The reasoning above, applied in relation to claim 1, can thus also be applied in relation to claim 24 and this claim is thus also novel and non-obvious over the prior art.

Claim 25 depends on claim 24. For that reason claim 25 is submitted to also be novel and non-obvious over the prior art.

3. Rejections of claims under 35 U.S.C. § 103

In the Office action, page 10, point 4, claims 11-14 presently stand rejected under 35 USC § 103(a) as being unpatentable over Greene in view of Someya and further in view of Miller et al. (USPN: 7184067).

Claims 11-14 are claims dependent on claim 1, which is submitted to be patentable. Claims 11-14 are thus also submitted to be novel and non-obvious.

4. Conclusion

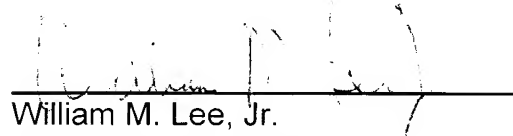
In view of the foregoing remarks, it is respectfully submitted that the application is in condition for allowance. Accordingly, it is requested that claims 1-18, 20 and 23-26 be allowed.

If any issues remain that may be resolved by a telephone or facsimile communication with the Applicant's attorney, the Examiner is invited to contact the undersigned at the numbers shown below.

A necessary Petition for Extension of Time is also submitted herewith.

April 6, 2009

Respectfully submitted,

A handwritten signature in dark ink, appearing to read "William M. Lee, Jr.", is written over a horizontal line.

William M. Lee, Jr.
Registration No. 26,935
Barnes & Thornburg LLP
P.O. Box 2786
Chicago, Illinois 60690-2786
(312) 214-4800
(312) 759-5646 (fax)